p. 8, lines 17-26. The dependence of claim 19 is amended. No new matter is introduced by way of this amendment. An appendix of pending claims is also provided for the Examiner's convenience (Appendix A). Also, Appendix B is a Version Showing Changes to the claims.

Response to Rejections

Double Patenting Rejection

Claims 14-26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-30 of U.S. Patent No. 6, 355,431 B1. Based on the currently pending claims, Applicants respectfully traverse the rejection.

As a preliminary matter, Applicants submit, that in determining whether a non-statutory basis exists for a double patenting rejection, the question to ask is not whether the claims of the instant application are embraced or encompassed by the claims of another patent, but rather whether any claim in the instant application defines an invention that is merely an obvious variation of an invention claimed in another application or patent. See M.P.E.P. §804.

An obviousness-type double patenting rejection is analogous to the obviousness rejection based on 35 U.S.C. §103, except that only the claims in the cited patents or applications are considered prior art. See M.P.E.P. §804. Therefore, the analysis employed in an obviousness-type double patenting rejection parallels the analysis of a 35 U.S.C. §103 obviousness

determination, and a prima facie case of obviousness must be established. See In re Braat, 937 F.2d 589, 19 USPQ2d 1289 (Fed. Cir. 1991).

In addition, Applicants also note that "[a]ny obviousness-type double patenting rejection should make clear:

> (A) the differences between the inventions defined by the conflicting claims- a claim in the patent compared to a claim in the application; and
>
> (B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim in issue is an obvious variation of the invention defined in a claim in the patent." (MPEP 804).

Here, Applicants respectfully submit that the Examiner has not set forth the differences between a claim of the patent and a claim in the application. Moreover, Applicants submit that the Examiner has not set forth why a person of ordinary skill in the art would conclude that the invention defined in the claim in issue is an obvious variation of the invention defined in a claim in the patent.

Further, Applicants submit that the present claims are not an obvious variant of the claims of the '431 patent. As the Examiner is aware, to make a prima facie case of obviousness, all claim limitations must be taught or suggested in prior art. See M.P.E.P. §2143.03.

However, Applicants submit that not all claim elements of the present claims are claimed in the '431 patent. That is, claim 1 of 6,355,431 ('431) is directed to a method for detecting a

first target nucleic acid sequence comprising hybridizing at least a first primer nucleic acid to said first target sequence to form a first hybridization complex, contacting said first hybridization complex with a first enzyme that causes a modification of said first primer nucleic acid to form a modified first primer nucleic acid, disassociating the first hybridization complex, and contacting the modified first primer nucleic acid with an array. The array includes a substrate with a surface comprising discrete sites and a population of microspheres comprising at least a first subpopulation comprising a first capture probe such that the first capture probe and the modified primer form an assay complex. The microspheres are randomly distributed on said surface. The method additionally includes detecting the presence of the modified primer nucleic acid.

In contrast, the claims of the present invention are directed to analyzing nucleic acid sequences using microspheres distributed on a surface. To each microsphere is attached a plurality of different target analytes. The method further includes contacting the beads, each bead with a plurality of different target analytes attached, with a plurality of readout probes to detect the presence of a first target analyte.

Thus, the present claims recite that a plurality of target analytes are attached to each microsphere, while the '431 patent claims are silent with respect to a plurality of different target analytes being attached to a microsphere

Because the '431 claims are silent with respect to a plurality of different target analytes being attached to a microsphere, Applicants submit that the subject matter of the pending claims and that claimed in the '431 patent is patentably distinct. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection.

Rejections based under 35 U.S.C. § 102

Claims 14-29 are rejected under 35 U.S. C. § 102(e) as being anticipated by Chee et al (WO 99/67641. Applicants note that the Examiner has rejected the claims under section under 35 U.S. C. § 102(e)(see paragraph 5 of the Office Action). However, the Examiner also recited § 102(a) in the office action (see paragraph 4). Because WO 99/67641 was publicly available as of the filing of the instant application, Applicants will respond to this rejection as though it is a rejection under § 102(a). That is, WO 99/67641 was published December 29, 1999, while the present application claims the benefit of provisional application filed 60/182,955, February 16, 2000.

In response, Applicants are submitting herein a Declaration under 37 C.F.R. §1.131 by the inventors, Mark S. Chee, and Jian-Bing Fan, referencing an invention disclosure dated prior to December 29,1999. The declaration outlines that the invention was completed in this country prior to December 29, 1999. Accordingly, the reference is not a proper prior art reference, and the rejection should be withdrawn.

CONCLUSION

Applicants submit that the claims are now in condition for allowance and early notification to that effect is respectfully requested. If the Examiner feels there are further unresolved issues, the Examiner is respectfully requested to phone the undersigned at (415) 781-1989.

Respectfully submitted,

DORSEY & WHITNEY LLP

Date: 2/14/2003

David C. Foster
Reg. No. 44,685, for
Robin M. Silva
Reg. No. 38,304

Four Embarcadero Center
Suite 3400
San Francisco, CA 94111-4187
Telephone: (415) 781-1989